Correspondence

Coccidioidal Meningitis

To the Editor—I commend the journal for commissioning an in-depth review on coccidioidal meningitis by Johnson and Einstein [1], because the disease remains so difficult to treat in so many cases. I would appreciate the opportunity to comment on several points. First, the fact that the disease is nearly universally fatal without treatment is emphasized by data from the era before amphotericin B and azoles, from one of the authors [2]. The review authors cite a single case report of prolonged survival without treatment; Kelly [3] reviewed in depth the pretherapy roster of surviving patients. Although the review authors indicate “a pivotal change in the therapeutic paradigm came with the fluconazole study by Galgiani et al. [4]” [1, p. 105] in 1993, I wish to point out that, in 1988, my colleagues and I first reported the pharmacokinetics of fluconazole in spinal fluid specimens obtained from patients with coccidioidal meningitis [5]. That study included initial impressions of clinical results, and we published an open efficacy trial with fluconazole in 1990 [6]. It warrants reemphasis that azoles do not appear to be curative, as indicated in another study cited by the authors [7]. Recent findings (presented in abstract form) by Dr. Johnson further emphasize that it appears increasingly to be the case that fluconazole does not always provide prolonged remissions, even in patients continuing therapy; this has also been our own experience. Finally, although itraconazole results appear clinically comparable to those of fluconazole in open trials [8], a direct comparison submitted for full publication [9] in the mouse model [10] indicates that itraconazole appears to be the more potent drug on a milligram-per-kilogram, or microgram-per-milliliter of serum or CSF, basis.

Finally, 3 minor corrections: the title in reference 5 of the review was misspelled, and should read “Coccidioidal meningitis”; reference 17 had incorrectly cited pages (cited correctly in reference 2 of this letter); and the initials of the last author in review reference 41 should be “DA.”

Acknowledgments


David A. Stevens
Division of Infectious Diseases, Santa Clara Valley Medical Center, San Jose, and School of Medicine, Stanford University, Stanford, California

References


Clinical Infectious Diseases 2006; 43:385
© 2006 by the Infectious Diseases Society of America. All rights reserved. 1098-4833/2006/4303-0022$15.00

Reply to Stevens

To the Editor—The expansion and illuminations to our recent article provided by Stevens [1] are appreciated. Unfortunately, limitations of space did not allow inclusion of all salient information on such a complex disease process; the discussion of long-term survival without therapy was intended to be illustrative, not encyclopedic. Stevens’s reference to Kelly’s chapter in Coccidioidomycosis: A Text [2] will be of help to those interested in further data on the subject.

Our reference to the 1993 publication by Galgiani et al. [3], again, was a selected reference and was not intended to discount important prior work. The results of this study were presented and known to many of us long before publication of the study. The optimal azole regimen for the treatment of coccidioidal meningitis could only be determined by appropriately designed, randomized human trials. There is no doubt that itraconazole is more active than fluconazole against coccidioides in vitro and in Stevens’s mouse model. In our minds, however, issues of adherence, absorption, and distribution make it a less desirable first-line drug for use by most infectious disease clinicians. Itraconazole may also have additional modest toxicity.
Assessment of Carriage of Haemophilus influenzae Type a after a Case of Invasive Disease

To the Editor—We read with interest the paper by Kapogiannis et al. [1] describing 2 cases of severe invasive Haemophilus influenzae serotype a (Hia) disease. Non-type b H. influenzae is an uncommon cause of invasive disease; however, use of conjugate vaccine has resulted in a significant decrease in the incidence of H. influenzae type b (Hib) disease, and the relative importance of non-type b H. influenzae infections has increased. Enhanced awareness of non-type b H. influenzae disease is warranted, especially given the acquisition of virulence factors commonly associated with Hib by certain strains of non-type b H. influenzae [1–3].

We previously reported an outbreak of Hia disease in which 2 infants developed recurrent infections with Hia. Oropharyngeal swab cultures revealed Hia carriage in 5 (16%) of 31 close contacts of the 2 case patients [4]. On the basis of the absence of identification of secondary cases, there is no recommendation to provide chemoprophylaxis to close contacts of patients infected with non-type b H. influenzae; however, in this situation, rifampin chemoprophylaxis was prescribed to all close contacts of the 2 patients who developed reinfection, given that household transmission may have been occurring.

We recently investigated another case of invasive Hia disease. The patient presented at age 6 months with a 1-day history of cough, fever, and decreased activity. Chest radiography revealed a right upper lobe infiltrate. Blood cultures grew H. influenzae that was β-lactamase negative and was identified as serotype a by latex agglutination. The patient was treated with antimicrobials and returned to his baseline state of health. ELISAs of acute- and convalescent-phase serum samples found no detectable IgG antibodies to the Hia polysaccharide capsule.

Oropharyngeal swab samples were collected from all close contacts of the patient and from members of 3 comparison families that had children of similar age to the case patient and who were residents of the same community but who were not close contacts. “Close contacts” were people residing with the case patient or nonresidents who spent ≥4 h with the index patient for at least 5 of the 7 days preceding the day of hospital admission of the index case [5]. Hia carriage was identified in 3 (43%) of 7 close contacts and in none of 20 comparison participants (exact P = .012). The treating clinician prescribed rifampin chemoprophylaxis to the 3 colonized individuals.

We know of no cases of invasive Hia illness among contacts of persons with disease; however, the identification of carriage among contacts raises this concern. Additionally, because infants produce a weak or undetectable response to polysaccharide capsule, the possibility exists that they may develop recurrent invasive Hia disease as a result of transmission from close contacts. We suspect that this may have been the cause of recurrent illness among the cluster of cases we recently reported [4]. More studies are needed to help define the role, if any, of chemoprophylaxis among contacts of patients with non-type b H. influenzae. No population-based prevalence study has been conducted to measure non-type b H. influenzae carriage; however, in Alaska, surveillance for encapsulated H. influenzae invasive disease is ongoing and we are continuing to assess carriage among close contacts and non–close contact members of the community. As Kapogiannis et al. [1] point out, it is important to monitor the incidence and serotype distribution of invasive encapsulated H. influenzae disease in infants and children; particular attention should be paid to the occurrence of recurrent invasive disease or of disease among contacts of case patients.

Acknowledgments

Potential conflicts of interest. All authors: no conflicts.

Laura L. Hammitt,1,2 Thomas W. Hennessy,1 Sandra Romero-Steiner,2 and Jay C. Butler1

1Arctic Investigations Program, National Center for Infectious Diseases, Centers for Disease Control and Prevention, 2Alaska Native Tribal Health Consortium, Anchorage, Alaska, and 3Division of Bacterial and Mycotic Diseases, National Center for Infectious Diseases, Centers for Disease Control and Prevention, Atlanta, Georgia

References